# New Hampshire Department of Health and Human Services

# **Fact Sheet**

## St. Louis Encephalitis

#### What is St. Louis encephalitis?

St. Louis encephalitis (SLE) is a mosquitoborne illness caused by a virus. It is one of a group of such illnesses, including eastern encephalitis and equine LaCrosse encephalitis, which can affect the central nervous system in people and cause severe complications or even death. SLE is found primarily in the Midwest and the southern United States, although occasional cases occur along the East Coast as far north as Connecticut and New York. Travelers to Central and South American and the Caribbean are also at risk of infection

### How do the mosquitoes get St. Louis encephalitis?

Mosquitoes become infected when they feed on birds carrying the SLE virus. Infected mosquitoes then transmit the St. Louis encephalitis virus to other birds and to humans when they bite them.

#### How does someone get St. Louis encephalitis?

People get SLE when an infected mosquito bites them. People cannot get SLE from other insects, birds, or other animals. SLE is not transmitted from person to person, so an infected person cannot give the illness to someone else.

#### What are the symptoms of St. Louis encephalitis?

Some people only get a mild illness with fever and headache. More severe illness can lead to severe headache, high fever, neck stiffness, impaired consciousness, coma, tremors, occasional seizures (especially in infants), and paralysis. Up to 30% of infected people die. The elderly are more likely to die from SLE than younger patients.

#### What is the incubation period for SLE?

It usually takes 5-15 days for symptoms to occur after being bitten by an infected mosquito.

#### How is St. Louis encephalitis diagnosed?

Diagnosis of SLE requires a blood test or a spinal tap.

#### What is the treatment for St. Louis encephalitis?

There is no specific treatment for SLE, but supportive therapy, such as hydration and the treatment of infections, should be provided.

### Is there a vaccine for St. Louis encephalitis?

No.

### How many cases of St. Louis encephalitis occur in the U.S. and NH?

Between 1964 and 2000 there were 4482 cases reported in the United States, with an average every year of 128. There have been no SLE cases reported in New Hampshire.

#### Who is at risk of getting St. Louis encephalitis?

Anyone visiting or residing in an area where mosquitoes carry the SLE virus are at risk of infection. The elderly, persons living in crowded conditions, and those who work

outside or participate in outdoor recreational activities in areas where SLE is common are at greater risk of getting sick.

#### What can people do to prevent getting St. Louis encephalitis?

As with any mosquito-spread disease, the best prevention is to avoid being bitten by mosquitoes. Both adults and children should wear an insect repellent with a concentration of DEET of 30%. Picaradin and oil of lemon eucalyptus have also been shown to be effective against mosquitoes. The mosquitoes that can cause St. Louis encephalitis are active throughout the day, so repellents are important throughout the day. When mosquitoes are most active, wear long pants, long sleeves, and socks. Make sure there is no standing water around your home and that all window screens fit securely.

## What should someone do if they think they may be infected with St. Louis encephalitis?

They should call their healthcare provider immediately.

For specific concerns about St. Louis encephalitis, call the New Hampshire Department of Health and Human Services, Communicable Disease Control Section at 603-271-4496 or 800-852-3345 x4496. For further information, refer to the Centers for Disease Control and Prevention website at www.cdc.gov or the New Hampshire Department of Health and Human Services website at www.dhhs.nh.gov.